

PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE
HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application of: James G. Shanahan et al.)
Appl. No.: 09/683,240) Art Unit: 2178
Filed: 12/05/2001) Examiner: Joshua D. Campbell

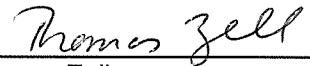
Title: META-DOCUMENT MANAGEMENT SYSTEM TRANSIT TRIGGERED ENRICHMENT

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith is the Appellant's Brief in the above-identified application.

- Charge \$500.00 to Deposit Account No. 24-0025.
- Please charge any additional fees under 37 C.F.R. §§1.16, 1.17 and 1.21 (but not 1.18) or credit any overpayment to Deposit Account No. 24-0025.
- Additional papers enclosed: Petition For Extension Of Time.

Respectfully submitted,



Thomas Zell
Attorney for Appellant
Registration No. 37,481
Telephone: 650-812-4281

Date: April 24, 2006

PATENT APPLICATION
Attorney Docket No.
A1320Q1-US-NP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **James G. Shanahan et al.**

Application No.: **09/683,240** Group Art Unit: **2178** Confirmation No.: **8313**
Filing Date: **12/05/2001** Examiner: **Joshua D. Campbell**
For: **META-DOCUMENT MANAGEMENT SYSTEM TRANSIT TRIGGERED ENRICHMENT**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION FOR EXTENSION OF TIME

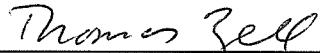
Sir:

It is respectfully requested that an extension of time under Rule 1.136(a), as specified below, be granted for responding to the Notice of Appeal of 12/22/2005.

- One (1) month - \$ 120.00
- Two (2) months - \$ 450.00
- Three (3) months - \$ 1020.00
- Four (4) months - \$ 1590.00
- Five (5) months - \$ 2160.00
- This Petition accompanies an Appeal Brief.

Please charge the fee for this extension of time, and any other fees which may be required under 37 CFR 1.16, 1.17, 1.21, and 1.136(a) (but not 1.18), to Deposit Account No. 24-0025.

Respectfully requested,



Thomas Zell

Signature under 37 CFR 1.33 & 34
Registration No. **37,481**
Telephone No. **650-812-4281**

Customer No. **25453**

Date: **April 24, 2006**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE
HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application of: James G. Shanahan et al.) Examiner: Joshua D. Campbell
)
Appl. No.: 09/683,240)
)
Filed: 12/05/2001) Art Unit: 2178
)
) Docket No. A1320Q1-US-NP

Title: **META-DOCUMENT MANAGEMENT SYSTEM WITH TRANSIT TRIGGERED
ENRICHMENT**

Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

Appellant respectfully submits this Appeal Brief in the appeal of the present case to the Board of Appeals and Patent Interferences on the Notice dated December 22, 2005.

TABLE OF CONTENTS

	Page
I. REAL PARTY IN INTEREST	1
II. RELATED APPEALS AND INTERFERENCES	2
III. STATUS OF CLAIMS	3
IV. STATUS OF AMENDMENTS	4
V. SUMMARY OF CLAIMED SUBJECT MATTER.....	5
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	7
VII. ARGUMENT	8
A. Overview Of Cited References	8
B. First Group Of Claims, Consisting Of Claim 1 (And Its Dependent Claims 2, 3, and 5-9), Claim 10 (And Its Dependent Claims 11, 12, and 15-18), and Claim 19 (And Its Dependent Claim 20), Is Patentable Over Horowitz in view of Goodisman	10
C. Second Group Of Claims, Consisting Of Claims 4 and 13 (and its dependent claim 14), Are Patentable Over Horowitz in view of Goodisman.....	13
D. Conclusion.....	15
CLAIMS APPENDIX	A-1
EVIDENCE APPENDIX	B-1
RELATED PROCEEDINGS APPENDIX.....	C-1

I. REAL PARTY IN INTEREST

The real party of interest in the present application is the assignee of the present application, Xerox Corporation.

II. RELATED APPEALS AND INTERFERENCES

Cross-reference is made to U.S. Patent Application Serial No. 09/683,239, entitled "Meta-Document Management System With Document Identifiers", which is assigned to the same assignee as the present invention and for which an Appeal Brief was filed on April 24, 2006.

III. STATUS OF CLAIMS

Claims 1-20 are on appeal.

Claims 1-20 are pending in this application. Of these, claims 1, 10, and 19 are independent claims.

Claims 1-20 have been finally rejected in an Office Action mailed September 22, 2005 (hereinafter referred to as the "Final Office Action "), on the grounds further discussed herein.

IV. STATUS OF AMENDMENTS

An amendment filed July 6, 2005 that amended claims 1, 2, 4, 10, 11, 13, and 19 has been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Generally, Appellant's invention recited in claims 1-20 concerns a method, apparatus and article of manufacture therefor, for invoking at a print client interface, document enrichment at an insertion point that identifies a processing stage of a print command invoked from the print client interface. As recited in independent claims 1, 10, and 19 (which make up the *first group*), and described in paragraphs 0190-0192 and illustrated in Figures 8 and 9 (reproduced below) of Appellant's specification, print property settings and properties of a document service request may be selected in a print client interface (see reference number 800 in Figure 8) that include enriching document content with a personality related to an enrichment theme (see, for example, buttons identified by reference number 804 in Figure 8 that enables a user to manually select a personality to apply to a given print request) at an insertion point that identifies a processing stage in printing the document content (see, for example, buttons identified by reference number 906 in Figure 9), which document content is defined by a document property included in the document service request (see reference number 808 in Figure 8) and which document content is annotated according to the enrichment theme of the personality specified in an enrichment property of the document service request.

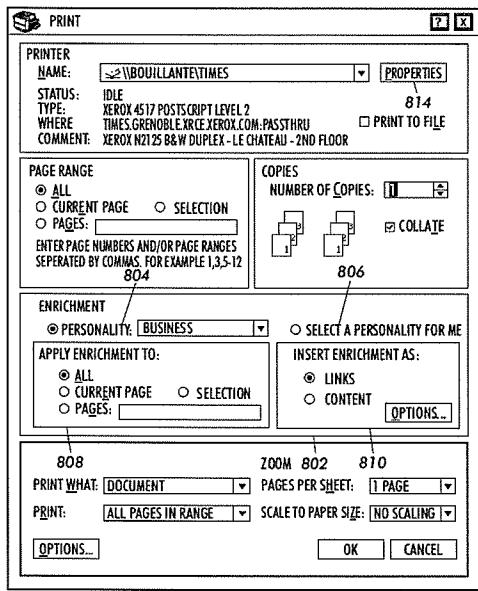


FIG. 8

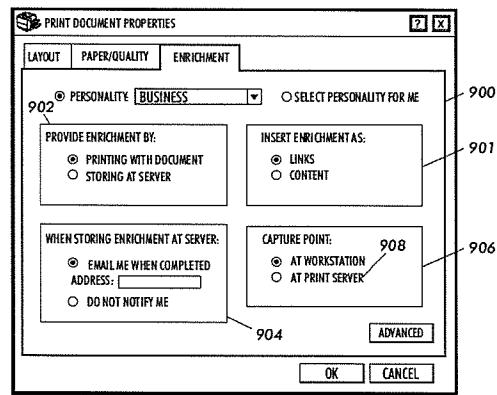


FIG. 9

In one embodiment recited in claims 4 and 13 (which make up the *second group*), which is described in paragraph 0192 and illustrated in Figure 9 at 906

(reproduced above) of Appellant's specification, the insertion point (or capture point) identifies a processing stage of the print command invoked from a print client interface that may be specified to occur at a client workstation or at a print server. An insertion point identifies a point at which a stage of document processing has begun or ended, for example, before being converted to postscript at the client workstation or before being directed to a specific printer by a print server.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-6, 10-15, and 19-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Horowitz et al., U.S. Patent 6,122,647 (hereinafter "Horowitz") in view of Goodisman et al., U.S. Patent Application Publication 2002/0069223, filed October 3, 2001 (hereinafter "Goodisman Application") that claims priority to Provisional Patent Application Serial No. 60/249498, filed November 17, 2000 (hereinafter "Goodisman Provisional").

Claims 7 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Horowitz in view of Goodisman as applied to claims 1 and 10, and further in view of Keith JR, U.S. Patent Application Publication 2002/0032672 (hereinafter "Keith").

Claims 8, 9, 17, and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Horowitz in view of Goodisman as applied to claims 1 and 10, and further in view of Nehab et al., U.S. Patent 6,029,182 (hereinafter "Nehab").

VII. ARGUMENT

Appellant respectfully traverses the rejection of the pending claims and submits they are in condition for allowance for the reasons set forth below.

A. Overview Of Cited References

In this section A, Appellant summarizes the references cited in the Final Office Action in rejecting the claims. The Final Office Action relies on Horowitz and Goodisman in rejecting claims 1, 4, 10, 13, and 19 as discussed below in sections B-C below. In addition, as noted in section B.3 below, Keith is relied on in rejecting claims 7 and 16, which depends from claims 1 and 10, respectively and form part of the first group, and as noted in section B.4 below, Nehab is relied on in rejecting claims 8-9 and 17-18, which depend (directly or indirectly) from claims 1 and 10, respectively and form part of the first group.

A.1 Summary of Horowitz

Generally, Horowitz discloses a method for creating contextual hyperlinks in a source document, where the hyperlinks associate the source document with available target documents. The method includes selecting terms relevant to the user through linguistic analysis, from which relevant target documents are identified. A tagging module receives user selected portions of a document and selects terms to be used for establishing contextual links. A presentation module identifies topics in the knowledge base associated with the selected terms, and creates hyperlinks between the terms in the source document and target documents. (See Horowitz Abstract.)

A.2 Summary of Goodisman

The Final Office Action relies on paragraphs 0006-0007 and 0024-0027 of Goodisman in rejecting independent claims 1, 10, and 19 (see the Final Office Action on: page 3, lines 7-8 and on page 6, lines 11-12), which paragraphs are *not* disclosed in provisional patent application serial No. 60/249498, filed November 17, 2000 (hereinafter referred to as the "Provisional Application of Goodisman") to which Goodisman claims priority.

Accordingly, Appellant respectfully submits that the paragraphs 0006-0007 and 0025-0027 that have been relied on in rejecting independent claims 1, 10, and

19 may not be relied on as prior art under 35 U.S.C. §103(a) in rejecting Appellant's invention as Goodisman was filed on October 3, 2001 and Appellant's claimed invention is entitled to a priority date of August 13, 2001.

In view of the forgoing, Appellant's discussion in sections B-C concerning Goodisman is limited to the disclosure in the Provisional Application of Goodisman.

Generally, the Provisional Application of Goodisman concerns methods for integrating the wireless web with java-based application servers. The methods include user interfaces for browser-based clients, a context-sensitive engine, and auto-link generator, and an auto-abbreviation generator (see the Provisional Application of Goodisman on page 24, lines 7-13).

A.3 Summary of Keith

Generally, Keith discloses a method for performing a search of a database to generate matching items in the database, where a matching item representing a node within a directory tree structure is formatted into an encyclopedia-like entry (see Keith paragraph 0022, on page 3). More specifically, Keith describes coupling a notification module to a saved search module to notify users that desire information that has been added to a searchable database (see Keith paragraph 0083, on page 9). As an example, announcements related to a particular model of car are pushed by the notification module to car dealerships that would like to receive that information as it is added to the searchable database (see Keith paragraph 0095, on page 11).

A.4 Summary of Nehab

Generally, Nehab discloses a data retrieval system for automatically traversing hypermedia documents accessible on networks such as the Internet in search of user specified content. The data retrieved by the system is personalized and may be defined using content-based rules. Once retrieved, the data is synthesized and arranged based on a user's preferred layout. (See Nehab column 1, lines 7-55.) More specifically, Nehab discloses a personal-news-profile that "contains information as to what sites to access for creating a personalized newspaper, what sections to retrieve from those sites, rules to be used to determine what data to extract from the sections and the articles therein, rules to determine how to exclude links, and newspaper format information". (See Nehab column 7, lines 28-33.)

B. First Group Of Claims, Consisting Of Claim 1 (And Its Dependent Claims 2, 3, and 5-9), Claim 10 (And Its Dependent Claims 11, 12, and 15-18), and Claim 19 (And Its Dependent Claim 20), Is Patentable Over Horowitz in view of Goodisman

In this section, Appellant traverses the rejection of the first group of claims, consisting of claim 1 (and its dependent claims 2, 3, and 5-9), claim 10 (and its dependent claims 11, 12, and 15-18), and claim 19 (and its dependent claim 20), as being obvious under 35 U.S.C. §103(a) over Horowitz in view of Goodisman. For the purpose of discussion presented in this section, claim 1 is discussed as a representative claim of the first group, which includes independent claims 10 and 19.

B.1 Enriching Document Content At An Insertion Point That Identifies A Processing Stage Of A Print Command Invoked From A Print Client Interface Is Not Disclosed Or Suggested

In rejecting claim 1, the Final Office Action alleges that subject matter of the claimed invention is made obvious in view of the disclosure in columns 5 and 9-11 of Horowitz and the Provisional Application of Goodisman. Appellant respectfully disagrees.

Horowitz discloses in the sections of columns 5 and 9-11, which were cited in the Final Office Action on pages 2-3 when rejecting claim 1, that: (a) an implementation of a knowledge base in which topics and terms are stored in a topic-term table, where each topic in the knowledge base may have a unique ID code for cross-referencing in other tables (see Horowitz column 5, lines 56-54); (b) unified noun phrases and nouns are selected based on frequency of occurrence and tagged using a knowledge base (see Horowitz column 9, lines 1-63); (c) a process of generating links to target documents by looking up topics for each tag and linking documents associated with the topic to the term in the tag (see Horowitz column 10, lines 8-27); (d) a server that is adapted to pass user selected portions of a page to a tagging module which generates tags for the selected portion (see Horowitz column 11, lines 24-52).

The Final Office Action admits on page 3, lines 2-8 and on page 6, lines 9-12 that Horowitz fails to disclose “explicitly that the enrichment property is a part of the initial request or that the device is a printer and the request is a print command”, yet

maintains that Goodisman discloses a method that teaches “the client may be a printer, [and] thus the request for a print command (page 2, paragraphs 0024-0027)”, which as set forth above in section A.2 Appellant asserts may not be relied on as prior art under 35 U.S.C. §103(a) in rejecting claim 1.

Referring therefore to the disclosure in the Provisional Application of Goodisman, Appellant respectfully maintains that disclosure in the Provisional Application of Goodisman fails to teach that a client may be a printer as asserted in the Final Office Action. Instead, the Provisional Application of Goodisman discloses “a context-sensitive engine for interpreting data transmitted between [a] server and [a] wireless device” (see the Provisional Application of Goodisman p. 22, lines 6-7) and location services that include directions, radius search, tracking, dynamic proximity, itinerary/schedule, location analysis, dynamic proximity, probabilistic location determination, user profile creation based on location tracking, extrapolating conditions based on wireless device density (see the Provisional Application of Goodisman, pages 10-11).

Accordingly, the context-sensitive engine and the location services disclosed in the Provisional Application of Goodisman fails to teach that a client may be a printer as alleged in the Final Office Action, and more specifically fails to disclose or suggest singly or together with Horowitz, Appellant’s claimed limitations recited in claim 1 of: invoking a print command from a print client interface at which a personality that identifies an enrichment theme may be selected, and enriching document content at an insertion point that identifies a processing stage of the print command invoked from the print client interface, with the personality selected at the print client interface.

B.2 Keith Does Not Pertain To The Elements Of Claim 1

Appellant submits that the rejection of claims 7 and 16, as being obvious under 35 U.S.C. §103(a) over Horowitz in view of Goodisman and further in view of Keith does not pertain to the elements recited in claim 1. The specific section of Keith relied on in the Final Office Action in rejecting claims 7 and 16 include paragraphs 0092-0094 on pages 10-11, which describes the use of push technology “in response to a saved search by a specific user” (see Keith paragraph 0092, on pages 10-11).

The disclosure in Keith related to the notification of desired information whether taken singly or in combination with Horowitz and/or Goodisman, however, fails to disclose or suggest Appellant's claimed limitations recited in claim 1 taken as a whole, which includes enriching document content at an insertion point that identifies a processing stage of a print command invoked from a print client interface. As discussed above as in section A.3, notification in Keith concerns the notification when additions are made to a searchable database, not when document content is enriched as recited in claim 1.

B.3 Nehab Does Not Pertain To The Elements Of Claim 1

Appellant submits that the rejection of claims 8, 9, 17, and 18, as being obvious under 35 U.S.C. §103(a) over Horowitz in view of Goodisman and further in view of Nehab does not pertain to the elements recited in claim 1. The specific section of Nehab relied on in the Final Office Action in rejecting claim 8, 9, 17, and 18 include Figures 9A, which illustrates a graphical user interface of an example HTML formatter and column 10, lines 6-20, which concerns process steps by which formatting options of a personal news profile are defined.

The disclosure in Nehab related to a process by which a personal news-profile is defined whether taken singly or in combination with Horowitz and/or Goodisman fails to disclose or suggest Appellant's claimed limitations recited in claim 1 taken as a whole, which includes enriching document content at an insertion point that identifies a processing stage of a print command invoked from a print client interface. As discussed above as in section A.4, Nehab concerns a data retrieval system for automatically traversing hypermedia documents in search of user specified content, not the enrichment of document content as recited in claim 1.

B.4 Summary

The contextual creation of hyperlinks disclosed in Horowitz (described above in section A.1) read singly or together with the location services disclosed in the Provisional Application of Goodisman (described above in section A.2), fail to disclose or suggest Appellant's invention recited in independent claim 1 for enriching content of a document at an insertion point that identifies a processing stage of a print command invoked from a print client interface, with a personality that identifies enrichment themes selected at the print client interface.

Accordingly, in view of these and other distinguishing features of Appellant's claimed invention set forth in claim 1 discussed above, claim 1 is believed to be patentably distinguishable over Horowitz in view of the Provisional Application of Goodisman.

In addition, it should be noted that claims 10 and 19 contain the same or very similar limitations to those discussed above with respect to claim 1, and therefore the argument presented above with regard to claim 1 applies equally to claims 10 and 19.

Insofar as claims 2-3, 5-9, 11-12, 15-18, and 20 are concerned, these claims depend from and incorporate all of the limitations of one of now presumably allowable independent claims 1, 10, or 19 and are also believed to be in allowable condition.

C. Second Group Of Claims, Consisting Of Claims 4 and 13 (and its dependent claim 14), Are Patentable Over Horowitz in view of Goodisman

In this section, Appellant traverses the rejection of the second group of claims, consisting of claims 4 and 13 (and its dependent claim 14), as being obvious under 35 U.S.C. §103(a) over Horowitz in view of Goodisman. For the purpose of discussion presented in this section, claim 4 is discussed as a representative claim of the second group, which includes claim 13, and which recites that an enrichment property at the client print interface defines an insertion point to be one of at a client workstation and at a print server.

The Final Office Action on page 3, lines 14-17 asserts that Horowitz discloses "a method in which a particular portion of a document is defined by the property, which would include a document insertion point, in this case the server (column 9, lines 1-63, column 10, lines 8-27, and column 11, lines 24-52 of Horowitz)". Appellant respectfully disagrees.

In cited column 9, Horowitz discusses the operation of a tagging module that unifies known phrases (e.g., "canine" and "dog" may be unified under the unifying topic "Dog", see Horowitz column 9, lines 7-9), counts the occurrence (see Horowitz column 9, lines 10-12), selects the most frequently occurring (see Horowitz column 9, lines 13-26), and looks up the selected terms in a knowledge base to identify a topic (see Horowitz column 9, lines 27-28). If a topic is found that is associated with

the selected term that was looked up, then “the tagging module [] creates [] a tag which associates the topic and the term from the document” (see Horowitz column 9, lines 30-32). In cited column 10, Horowitz discusses the generation of links to target documents, which generation involves looking up topic(s) in a knowledge base for each tag, retrieving the documents associated with the topic, and creating a link between the term in the tag and each document (see Horowitz column 10, lines 8-27). In cited column 11, Horowitz discusses other embodiments in which the tagging module may be used (see Horowitz column 11, lines 24-66).

As summarized above, the disclosure concerning a tagging module and tags in Horowitz columns 9-11 fails to disclose or suggest an enrichment property at the client print interface that defines an insertion point (that identifies a processing stage of the print command invoked from the print client interface, as defined in claim 1) to be one of at a client workstation and at a print server as recited in Appellant's claim 4. Instead as summarized above, Horowitz in columns 9-11 concerns tagging terms in electronic documents, and therefore does not contemplate defining at a client print interface an enrichment property that defines an insertion point to be one of a client workstation and at a print server as claimed by Appellant in claim 4.

Accordingly, Appellant respectfully submits that for these reasons and the reasons set forth above regarding independent claim 1, dependent claim 4, which incorporates all limitations of claim 1 is patentably distinguishable over Horowitz whether taken singly or in combination with the Provisional Application of Goodisman.

In addition, it should be noted that claim 13 contains the same or very similar limitations to those discussed above with respect to claim 4, and therefore the argument presented above with regard to claim 4 applies equally to claim 13.

Insofar as claim 14 is concerned, this claim depends from and incorporates all of the limitations of now presumably allowable claim 13 and is also believed to be in allowable condition.

D. Conclusion

Based on the arguments presented above, claims 1-20 are believed to be in condition for allowance. Appellant therefore respectfully requests that the Board of Patent Appeals and Interferences reconsider this application, reverse in whole the rejection of claims 1-20, and pass this application for allowance.

Respectfully submitted,



Thomas Zell
Attorney for Appellant
Registration No. 37,481
Telephone: 650-812-4281

Date: 4/24/06

CLAIMS APPENDIX

CLAIMS INVOLVED IN THE APPEAL:

1. In a system for enriching content of a document using personalities that identify enrichment themes, a method for enriching documents, comprising:

invoking a print command from a print client interface that allows selection of print property settings and properties of a document service request; the document service request including at least one document property and one enrichment property; the at least one document property defining one of document content and a reference to the document content; the at least one enrichment property defining at least one personality identifier; and

enriching the document content, at an insertion point that identifies a processing stage of the print command invoked from the print client interface, with a personality identified by the personality identifier to define enriched document content;

wherein said enriching recognizes and annotates entities in the document content related to the enrichment theme of the identified personality.

2. The method according to claim 1, further comprising performing one of carrying out the print command with the enriched document content and carrying out the print command without the enriched document content while providing notification once the document content is enriched.

3. The method according to claim 1, wherein one enrichment property at the client interface defines a particular portion of the document content to enrich.

4. The method according to claim 1, wherein one enrichment property at the client interface defines the insertion point to be one of at a client workstation and at a print server.

5. The method according to claim 1, wherein said enriching further comprises:
associating the personality identifier with the document content;
recognizing, with at least a first method, an entity in the document content;
accessing, with at least a second method, a document service using the recognized entity;

annotating the document content with output from the document service to define enriched document content; and

making the enriched document content available to a set of users.

6. The method according to claim 1, wherein one enrichment property at the client interface defines a form in which the document content is to be annotated.

7. The method according to claim 1, wherein one enrichment property at the client interface defines an option to be notified when document enrichment completes.

8. The method according to claim 1, further comprising programming a set of enrichment properties in a set of personality buttons.

9. The method according to claim 8, wherein the set of personality buttons forms part of a user interface to one of a scanner, a Dictaphone, a video camera, and a printer.

10. A system for enriching content of a document using personalities that identify enrichment themes, comprising:

a print client interface for invoking a print command that allows selection of print property settings and properties of a document service request; the document service request including at least one document property and one enrichment property; the at least one document property defining one of document content and a reference to the document content; the at least one enrichment property defining at least one personality identifier; and

a meta-document server for enriching the document content, at an insertion point that identifies a processing stage of the print command invoked from the print client interface, with a personality identified by the personality identifier to define enriched document content;

wherein the meta-document server enriches the document content by recognizing and annotating entities in the document content related to the enrichment theme of the identified personality.

11. The system according to claim 10, further comprising means for performing one of carrying out the print command with the enriched document

content and carrying out the print command without the enriched document content while providing notification once the document content is enriched.

12. The system according to claim 10, wherein one enrichment property at the client interface defines a particular portion of the document content to enrich.

13. The system according to claim 12, wherein one enrichment property at the client interface defines the insertion point to be one of at a client workstation and at a print server.

14. The system according to claim 13, wherein the meta-document server further comprises:

means for associating the personality identifier with the document content;

means for recognizing, with at least a first method, an entity in the document content;

means for accessing, with at least a second method, a document service using the recognized entity;

means for annotating the document content with output from the document service to define enriched document content; and

means for making the enriched document content available to a set of users.

15. The system according to claim 10, wherein one enrichment property at the client interface defines a form in which the document content is to be annotated.

16. The system according to claim 10, wherein one enrichment property at the client interface defines an option to be notified when document enrichment completes.

17. The system according to claim 10, further comprising a set of personality buttons for programming a set of enrichment properties.

18. The system according to claim 17, wherein the set of personality buttons forms part of a user interface to one of a scanner, a Dictaphone, a video camera, and a printer.

19. An article of manufacture for use in a computer system for enriching content of a document using personalities that identify enrichment themes, comprising:

a memory;

instructions stored in the memory for operating a method for enriching documents, comprising:

invoking a print command from a print client interface that allows selection of print property settings and properties of a document service request; the document service request including at least one document property and one enrichment property; the at least one document property defining one of document content and a reference to the document content; the at least one enrichment property defining at least one personality identifier; and

enriching the document content, at an insertion point that identifies a processing stage of the print command invoked from the print client interface, with a personality identified by the personality identifier to define enriched document content;

wherein said enriching recognizes and annotates entities in the document content related to the enrichment theme of the identified personality.

20. The article of manufacture according to claim 19, wherein said enriching instructions further comprise instructions for:

associating the personality identifier with the document content;

recognizing, with at least a first method, an entity in the document content;

accessing, with at least a second method, a document service using the recognized entity;

annotating the document content with output from the document service to define enriched document content; and

making the enriched document content available to a set of users.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX

NONE